

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P560201

Luminaire Tested: FSR-12-2-LD4-2HI-35-UNV-81-88-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560201
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-5)
Test Lab: INNOVATION CENTER
Issue Date: 7/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FSR-12-2-LD4-2HI-35-UNV-81-88-EDD
Description: 1X2 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3002.0 lumens
Efficiency: N/A
Efficacy: 69.5 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

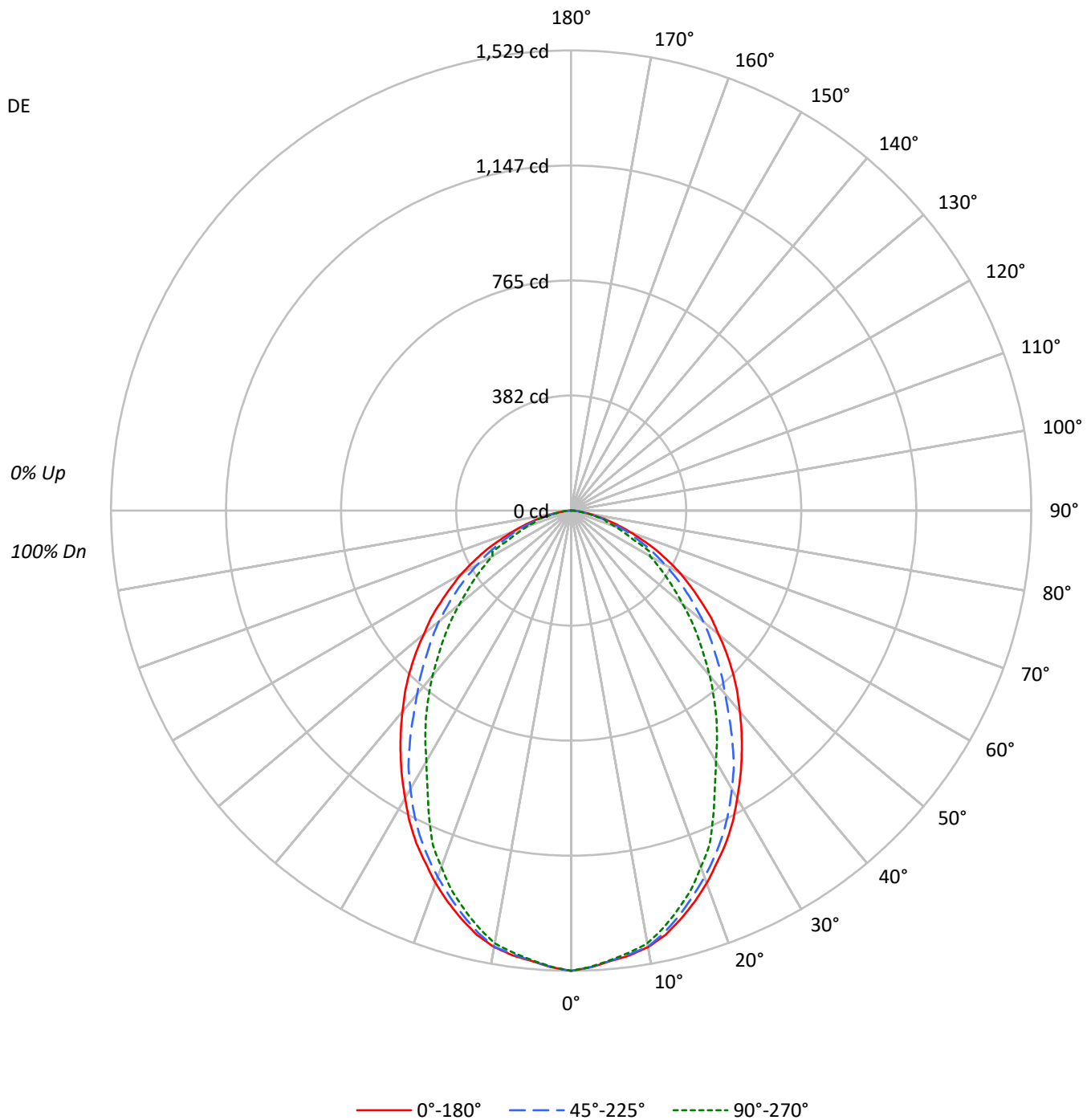
Input Watts (W): 43.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89					87				
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77					75				
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67					65				
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58					56				
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52					50				
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46					44				
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42					40				
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38					36				
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34					33				
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32					30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8230	8230	8230
5°	8118	8109	8099
10°	8048	8038	7980
15°	7831	7752	7643
20°	7543	7422	7219
25°	7233	7076	6635
30°	6855	6636	5977
35°	6493	6133	5529
40°	6123	5589	5030
45°	5772	5167	4548
50°	5344	4796	4056
55°	4943	4346	3633
60°	4528	3881	3254
65°	3985	3399	2882
70°	3282	2977	2448
75°	2610	2279	2389
80°	1754	1643	1534
85°	1093	1309	1525

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5772 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.3	4.7
10°-20°	390.7	13.0
20°-30°	540.8	18.0
30°-40°	576.7	19.2
40°-50°	526.1	17.5
50°-60°	412.2	13.7
60°-70°	268.6	8.9
70°-80°	119.0	4.0
80°-90°	25.5	0.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1073.8	35.8
0°-40°	1650.5	55.0
0°-60°	2588.8	86.2
0°-90°	3002.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3002.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1529	1529	1529	1529	1529	
5°	1503	1501	1501	1499	1499	143
15°	1405	1405	1391	1377	1372	395
25°	1218	1211	1192	1149	1117	559
35°	988	981	933	863	842	618
45°	758	742	679	622	598	584
55°	527	511	463	408	387	473
65°	313	295	267	272	226	308
75°	126	117	110	104	115	135
85°	18	19	21	23	25	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1529.2	1529.2	1529.2	1529.2	1529.2
2.5°	1518.6	1518.6	1518.6	1516.8	1516.8
5°	1502.7	1500.9	1500.9	1499.1	1499.1
7.5°	1490.3	1488.5	1486.8	1485.0	1481.4
10°	1472.6	1472.6	1470.8	1462.0	1460.2
12.5°	1444.3	1442.6	1435.5	1423.1	1419.6
15°	1405.4	1405.4	1391.3	1377.1	1371.8
17.5°	1363.0	1361.2	1343.6	1329.4	1322.3
20°	1317.0	1313.5	1295.8	1272.8	1260.5
22.5°	1265.8	1265.8	1244.6	1214.5	1202.1
25°	1218.0	1211.0	1191.5	1149.1	1117.3
27.5°	1163.2	1152.6	1131.4	1071.3	1034.2
30°	1103.1	1097.8	1067.8	990.0	961.7
32.5°	1046.6	1037.7	1005.9	924.6	901.6
35°	988.2	981.1	933.4	862.7	841.5
37.5°	929.9	921.0	860.9	804.4	777.8
40°	871.5	860.9	795.5	744.3	716.0
42.5°	816.7	802.6	739.0	684.2	652.3
45°	758.4	742.5	678.8	622.3	597.5
47.5°	700.1	685.9	627.6	569.2	541.0
50°	638.2	625.8	572.8	514.4	484.4
52.5°	586.9	567.5	516.2	457.9	433.1
55°	526.8	510.9	463.2	408.4	387.2
57.5°	472.0	456.1	411.9	360.6	343.0
60°	420.7	397.8	360.6	316.4	302.3
62.5°	364.2	346.5	314.7	277.6	295.2
65°	312.9	295.2	266.9	272.2	226.3
67.5°	256.3	247.5	222.7	198.0	190.9
70°	208.6	198.0	189.2	162.6	155.6
72.5°	166.2	155.6	143.2	129.1	123.7
75°	125.5	116.7	109.6	104.3	114.9
77.5°	86.6	83.1	77.8	72.5	70.7
80°	56.6	54.8	53.0	51.3	49.5
82.5°	33.6	33.6	33.6	33.6	33.6
85°	17.7	19.4	21.2	23.0	24.7
87.5°	10.6	10.6	12.4	14.1	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)